

# Mineral Industry Surveys

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## COPPER IN NOVEMBER 2002

Average daily mine production of copper rose slightly in November but remained 8% below production in November 2001. Year-to-date mine production through November was down by 16% from the comparative period in 2001. Average daily refined production fell by less than 2% from that in October but was down by 20% from production in November 2001. Year-to-date refined production was down by about 15% from the comparative period in 2001. Consumption of refined copper at wire-rod mills and brass mills in November declined by 5% and 17%, respectively.

Olin Corporation announced in mid-December that it was considering the possible closure of its brass manufacturing facility in Indianapolis, IN, owing to weak market demand for its products. The plant manufactured copper and copper alloy sheet and strip products and employed about 200 people. In January, Olin announced that the decision to close the plant had been made, and that owing to capacity additions at its East Alton, IL, facility it had sufficient capacity to meet customer needs. Closure was anticipated to be completed by the end of the first quarter of 2003, with production to be phased-out over several months (Olin Corporation, 2002, 2003). The plant had been shuttered or operating at significantly reduced capacity for a 5-month period ending in May 2002.

ASARCO Incorporated, announced that it had reached a decision on the fate of its Mission mining complex in southern Arizona. (See Copper in October 2002.) Instead of completely closing the facility, Asarco planned to reduce production by an additional 22,000 metric tons per year of copper in concentrates. Following the reduction, the Mission complex will be operating at just 15% of capacity. In 1998, at capacity, the Mission complex generated almost 116,000 metric tons (t) of copper in concentrate. The reduction was expected to affect downstream operations, reducing production at the Hayden, AZ, smelter by

about 33%, and the Amarillo, TX, refinery by about 13% (ASARCO Incorporated, 2002).

The International Copper Study Group (ICSG) released preliminary data for world supply and demand through November 2002. According to ICSG data, there was an apparent refined copper surplus for the first 11 months of 2002 of 105,000 t. This compares with a surplus of 536,000 t in the January to November 2001 period. Preliminary results for November 2002 showed a surplus of 38,000 t of refined copper. Previously, ICSG data had been showing a near balanced market for 2002. Upward revisions to Russian production numbers based on yearend company reports and an 8.1 % global decline in copper use in November, led to the apparent shift in supply balance. Use was down in all major centers of industrial activity: China, the European Union, Japan and the United States. Despite the weak November demand, world copper use for January to November 2002, increased by 2.1% compared with that of the same period in 2001, while world refined production fell by 1.1% for the same comparative period (International Copper Study Group, 2003).

### References Cited

- ASARCO Incorporated, Asarco to reduce Mission Unit copper production to 15 percent of total capacity: Phoenix, AZ, ASARCO Incorporated press release, December 20, 1 p.
- International Copper Study Group, 2003, Copper—Preliminary data for November 2002: Lisbon, International Copper Study Group press release, February 10, 1 p.
- Olin Corporation, 2002, Olin announces possible restructuring charges—Reaffirms earnings guidance excluding potential charges: Norwalk, CT, Olin Corporation press release, December 17, 1 p.
- Olin Corporation, 2003, Olin to close Indianapolis plant: Norwalk, CT, Olin Corporation press release, January 10, 1 p.

TABLE 1  
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1/

(Metric tons, unless otherwise specified)

	Source table 2/	2001 p/	2002		
			October	November	January - November
Production:					
Primary:					
Mine, recoverable	(2)	1,340,000	93,200	93,700	1,040,000
Refinery:					
Electrolytic:					
Domestic	(4)	808,000	73,100 r/	69,900	739,000
Foreign	(4)	192,000	W	W	40,000 3/
Electrowon	(4)	628,000	47,700 r/	45,600	543,000
Total	(4)	1,630,000	121,000	115,000	1,320,000
Secondary recoverable copper:					
Refineries	(5)	172,000	6,280	5,590	78,700
Ingot makers 4/	(5)	121,000	10,100	10,100	111,000
Brass and wire-rod mills	(5)	727,000	59,500	60,300	724,000
Foundries, etc. 4/	(5)	67,100	5,590	5,590	61,500
Smelter, total	(3)	919,000	59,800	57,500	627,000
Consumption:					
Apparent	(8)	2,510,000	253,000 r/	NA	NA
Refined (reported)	(7)	2,630,000	209,000	191,000	2,260,000
Purchased copper-base scrap	(9)	1,370,000	103,000	102,000	1,220,000
Stocks at end of period:					
Total refined	(11)	957,000	1,010,000	1,030,000	XX
Blister, etc.	(11)	98,000	77,400	77,200	XX
Prices:					
U.S. producer cathode (cents per pound) 5/	(12)	76.854	72.319	76.729	75.738
Imports: 6/					
Ores and concentrates 7/	(14)	47,000	33,000	NA	NA
Refined	(14)	991,000	79,000	NA	NA
Exports: 6/					
Ores and concentrates 7/	(15)	45,300	1,780	NA	NA
Refined	(15)	22,500	606	NA	NA

p/ Preliminary. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; included in "Domestic." XX Not applicable.

1/ Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

2/ Numbers in parentheses refer to the detailed tables where these data are located.

3/ January - April only; excludes withheld data.

4/ Monthly data and 2001 cumulative data estimated based on 2000 monthly average.

5/ Source: Platts Metals Week.

6/ Source: U.S. Census Bureau.

7/ Copper content.

TABLE 2  
MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES 1/

(Metric tons)

Period	Recoverable copper			Contained copper		
	Arizona	Others 2/	Total	Electrowon	Concentrates 3/	Total
2001: p/						
January -November	809,000 r/	421,000	1,230,000	574,000	673,000	1,250,000
November	73,000	29,000	102,000	54,100	49,300	103,000
December	75,900	35,800	112,000	54,200	59,100	113,000
Year	885,000	457,000	1,340,000	628,000	732,000	1,360,000
2002:						
January	65,400	28,600	94,100	52,700	42,500	95,300
February	59,200	31,000	90,300	45,700	45,900	91,500
March	66,100	35,200	101,000	51,400	51,200	103,000
April	61,100	32,800	93,900	49,600	45,500	95,100
May	66,900	29,900	96,800	50,700	47,500	98,200
June	62,800	29,800	92,600	50,400	43,400	93,800
July	63,000	29,700 r/	92,700 r/	50,300	43,400 r/	93,700 r/
August	64,400	28,400 r/	92,800	50,100	43,900 r/	94,000 r/
September	62,200	34,500	96,600 r/	48,300	49,700	98,000 r/
October	61,300 r/	31,900 r/	93,200 r/	47,700 r/	46,700 r/	94,400 r/
November	60,900	32,800	93,700	45,600	49,400	95,000
January - November	693,000	345,000	1,040,000	543,000	509,000	1,050,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes production from Alaska, Idaho, Missouri, Montana, Nevada, New Mexico, and Utah.

3/ Includes copper content of precipitates and other metal concentrates.

TABLE 3  
COPPER PRODUCED AT SMELTERS IN  
THE UNITED STATES, BY SOURCE 1/ 2/

(Metric tons, copper content)

Period	Anode production
2001: p/	
January - November	840,000 r/
November	75,600
December	79,600
Year	919,000
2002:	
January	64,300
February	50,300
March	61,900
April	60,400
May	62,200
June	55,400
July	50,400
August	50,300
September	54,400
October	59,800
November	57,500
January - November	627,000

p/ Preliminary. r/ Revised.

1/ Includes anode from primary or secondary sources.

2/ Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 4  
PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1/

(Metric tons)

Period	Primary materials				Scrap 3/	Total refined
	Electrolytic 2/		Electrowon	Total		
	Domestic	Foreign				
2001: p/						
January - November	733,000 r/	178,000 r/	574,000 r/	1,480,000 r/	166,000 r/	1,650,000
November	72,300	18,500	54,100	145,000	7,220	152,000
December	74,700	14,800	54,200	144,000	5,980	150,000
Year	808,000	192,000	628,000	1,630,000	172,000	1,800,000
2002:						
January	66,100	10,600	52,700	129,000	6,920	136,000
February	57,900	8,410	45,700	112,000	7,630	120,000
March	55,900	10,700	51,400	118,000	7,090	125,000
April	62,300	10,300	49,600	122,000	7,630	130,000
May	76,100	W	50,700	127,000	8,180	135,000
June	70,000	W	50,400	120,000	7,760	128,000
July	74,100	W	50,300	124,000	6,970	131,000
August	67,600 r/	W	50,100	118,000	7,590	125,000 r/
September	66,100	W	48,300	114,000	7,130	122,000
October	73,100 r/	W	47,700 r/	121,000 r/	6,280	127,000 r/
November	69,900	W	45,600	115,000	5,590	121,000
January - November	739,000	40,000 4/	543,000	1,320,000	78,700	1,400,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Domestic."

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Based on source of material at smelter level.

3/ Electrolytic and fire refined from scrap.

4/ January - April only; excludes withheld data.

TABLE 5  
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, copper content)

Period	Refineries 2/		Ingot makers 3/		Brass and wire-rod mills		Foundries, etc. 3/		Total 4/
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2001: p/									
January - November	34,000 r/	132,000 r/	27,400	83,200	649,000 r/	17,900	13,500	48,000	1,010,000 r/
November	2,230	4,990	2,490	7,560	57,800	1,640	1,230	4,360	82,300
December	1,840	4,140	2,490	7,560	58,500	1,880	1,230	4,360	82,000
Year	35,800	137,000	29,900	90,700	707,000	19,800	14,700	52,400	1,090,000
2002:									
January	3,110	3,810	2,490	7,560	60,500	1,790	1,230	4,360	84,800
February	3,350	4,270	2,490	7,560	62,600	1,820	1,230	4,360	87,700
March	2,910	4,180	2,490	7,560	65,400	1,770	1,230	4,360	89,900
April	3,300	4,320	2,490	7,560	64,000	904	1,230	4,360	88,100
May	3,710	4,470	2,490	7,560	64,700	1,840	1,230	4,360	90,400
June	3,430	4,330	2,490	7,560	70,000	1,780	1,230	4,360	95,200
July	2,800	4,170	2,490	7,560	65,500	1,720	1,230	4,360	89,800
August	3,400	4,180	2,490	7,560	68,700	1,570	1,230	4,360	93,500
September	3,070	4,050	2,490	7,560	68,000	1,190	1,230	4,360	92,000
October	2,240	4,040	2,490	7,560	58,400	1,080	1,230	4,360	81,400
November	2,160	3,430	2,490	7,560	59,200	1,080	1,230	4,360	81,500
January - November	33,500	45,300	27,400	83,200	707,000	16,500	13,500	48,000	974,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Electrolytically refined and fire-refined scrap based on source of material at smelter level.

3/ Monthly data and 2001 cumulative data estimated based on 2000 annual data.

4/ Does not include an estimate, based on reported 2000 data, of 3,790 tons per month from new scrap and 2,380 tons per month from old scrap of copper recovered from scrap other than copper-base.

TABLE 6  
PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD MILL SEMIFABRICATES 1/

(Metric tons, gross weight)

Period	Production		Shipments		Stocks, end of period	
	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2001: p/						
January - November	1,350,000 r/	1,750,000	1,360,000 r/	1,750,000 r/	XX	XX
November	116,000	158,000	117,000	155,000	52,300	27,900
December	113,000	134,000	111,000	134,000	54,200	27,900
Year	1,470,000	1,890,000	1,470,000	1,880,000	XX	XX
2002:						
January	123,000	146,000	125,000	143,000	49,500	30,300
February	122,000	139,000	123,000	134,000	48,500	35,600
March	131,000	148,000	130,000	145,000	48,900	38,800
April	130,000	155,000	130,000	157,000	48,800	36,400
May	131,000	155,000	132,000	158,000	48,200	33,000
June	134,000	139,000	133,000	143,000	51,900	28,500
July	123,000	144,000	123,000	147,000	51,400	25,400
August	132,000	148,000	132,000	152,000	51,900	21,500
September	127,000	145,000	125,000	147,000	54,600	19,500
October	130,000	154,000	127,000	151,000	57,300	25,200
November	117,000	138,000	119,000	137,000	55,400	26,200
January - November	1,400,000	1,610,000	1,400,000	1,610,000	XX	XX

p/ Preliminary. r/ Revised. XX Not applicable.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7  
CONSUMPTION OF REFINED COPPER 1/

(Metric tons)

Period and item	Wire-rod mills	Brass mills	Other plants 2/	Total
2001: p/				
January - November r/	1,660,000	535,000	52,200	2,240,000
November	153,000	45,700	5,220	204,000
December	132,000	41,800	5,220	179,000
Year	1,940,000	623,000	62,600	2,630,000
2002:				
January	143,000	46,600	5,220	195,000
February	140,000	47,500	5,220	193,000
March	149,000	51,400	5,220	206,000
April	157,000	51,400	5,220	214,000
May	157,000	58,600	5,220	220,000
June	143,000	54,500	5,220	202,000
July	150,000	49,600	5,220	204,000
August	157,000	54,300	5,220	216,000
September	152,000	51,000	5,220	209,000
October	151,000	52,000	5,220	209,000
November:				
Cathodes	143,000	36,300	1,210	181,000
Wire bars	--	--	614	614
Ingots and ingot bars	--	1,520	1,760	3,280
Cakes and slabs	--	(3/)	(3/)	(3/)
Billets and other	W	5,130	1,640	6,770
Total	143,000	42,900	5,220	191,000
January - November	1,640,000	560,000	57,400	2,260,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Cathodes." -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 2000 annual data.

3/ Withheld to avoid disclosing company proprietary data; included with "Billets and other."

TABLE 8  
U.S. APPARENT CONSUMPTION OF COPPER 1/

(Metric tons)

Period	Refined copper production	Copper in old scrap 2/	Refined general imports 3/	Refined exports 3/	Stock change during period	Apparent consumption
2001: p/						
January - October r/	1,340,000	289,000	950,000	19,900	497,000	2,060,000
October	137,000	24,400	78,600	4,630	32,800	202,000
November	145,000	21,200	148,000	5,290	63,800	245,000
December	144,000	20,600	101,000	571	56,600	208,000
Year	1,630,000	331,000	1,200,000	25,800	617,000	2,510,000
2002:						
January	129,000	20,100	134,000	393	53,600	229,000
February	112,000	20,600	113,000	699	32,200	213,000
March	118,000	20,500	64,300	3,150	19,900	180,000
April	122,000	19,800	105,000	652	16,200	231,000
May	127,000	20,900	70,200	814	(16,000)	233,000
June	120,000	20,700	79,500	6,770	(33,000)	247,000
July	124,000	20,400	83,500	7,690	13,500	207,000
August	118,000	20,300	98,200	2,550	(5,530)	239,000
September	114,000	19,800	64,000	1,320	(9,540)	206,000
October	121,000 r/	19,700	91,500	606	(21,400)	253,000
November	115,000	19,100	NA	NA	26,100	NA
January - October	1,210,000	203,000	904,000	24,600	49,800	2,240,000

p/ Preliminary. r/ Revised. NA Not available.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2000 data.

3/ Source: U.S. Census Bureau.

TABLE 9  
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers 2/		Brass and wire-rod mills 3/		Foundries, etc. 2/		Total scrap used
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2001: p/									
January - November	57,400 r/	133,000 r/	40,300	115,000	824,000	18,500	24,000	52,100	1,260,000 r/
November	4,360	2,760	3,670	10,400	73,100	1,660	2,180	4,740	103,000
December	3,900	1,950	3,670	10,400	73,900	1,930	2,180	4,740	103,000
Year	61,300	135,000	44,000	125,000	898,000	20,400	26,200	56,800	1,370,000
2002:									
January	2,390	3,650	3,670	10,400	76,600	1,840	2,180	4,740	105,000
February	3,410	4,120	3,670	10,400	79,100	1,880	2,180	4,740	110,000
March	2,940	4,030	3,670	10,400	82,700	1,830	2,180	4,740	112,000
April	3,340	4,160	3,670	10,400	80,600	951	2,180	4,740	110,000
May	3,750	4,250	3,670	10,400	81,500	1,900	2,180	4,740	112,000
June	3,470	4,170	3,670	10,400	88,300	1,840	2,180	4,740	119,000
July	2,840	4,020	3,670	10,400	82,900	1,770	2,180	4,740	113,000
August	3,450	4,020	3,670	10,400	86,300	1,630	2,180	4,740	116,000
September	3,000	3,890	3,670	10,400	86,100	1,250	2,180	4,740	115,000
October	2,610	3,950	3,670	10,400	73,900	1,130	2,180	4,740	103,000
November	2,100	3,320	3,670	10,400	73,700	2,160	2,180	4,740	102,000
January - November	33,300	43,600	40,300	115,000	892,000	18,200	24,000	52,100	1,220,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Monthly data and 2001 cumulative data estimated from 2000 annual data.

3/ Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10  
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/ 2/

(Metric tons, gross weight)

Scrap type and processor	2001 p/		2002			
	January - November	Year	September	October	November	January - November
No. 1 wire and heavy:						
Smelters and refiners	68,700 t/	73,200	5,240	5,670	5,670	61,300
Brass and wire-rod mills	362,000 t/	395,000	36,700	31,000	31,000	390,000
No. 2 mixed heavy and light:						
Smelters and refiners	98,600 t/	103,000	4,630	3,990	3,990	50,700
Brass and wire-rod mills	5,000	5,340	453	516	516	3,760
Total unalloyed scrap:						
Smelters and refiners	167,000 t/	176,000	9,870	9,660	9,660	112,000
Brass and wire-rod mills	367,000 t/	400,000	37,200	31,500	31,500	394,000
Red brass: 3/						
All plants	53,100 t/	57,400	4,650	4,510	4,510	50,200
Leaded yellow brass:						
All plants	325,000	353,000	30,500	30,600	30,600	333,000
Yellow and low brass:						
All plants	100,000 t/	109,000	10,600	3,700	3,700	96,000
Cartridge cases and brass:						
Smelters and refiners	W	W	W	W	W	W
Brass mills	32,600 t/	35,500	6,630	7,290	7,290	60,100
Auto radiators:						
Smelters and refiners	42,200 t/	45,700	3,490	3,490	3,490	38,400
Bronzes:						
Smelters and refiners	10,000 t/	10,900	912	912	912	10,000
Brass mills	7,370 t/	8,300	935	935	935	10,300
Nickel-copper alloys:						
All plants	17,200 t/	18,600	1,400	947	947	14,500
Low grade and residues:						
Smelters and refiners	48,900 t/	50,000	1,110	1,110	1,110	12,200
Other alloy scrap: 4/						
Smelters and refiners 5/	8,750	8,890	138	138	138	1,520
Brass mills	5,020 t/	5,570	565	565	565	6,140
Total alloyed scrap:						
Smelters and refiners	175,000 t/	185,000	10,700	10,700	10,700	118,000
Brass mills	476,000 t/	518,000	50,200	43,400	43,400	515,000
Total scrap:						
Smelters and refiners	342,000 t/	361,000	20,600	20,400	20,400	230,000
Brass and wire-rod mills	843,000 t/	919,000	87,300	75,000	75,000	909,000

p/ Preliminary. t/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Other alloy scrap: Smelters and refiners."

1/ Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 6,920 tons of scrap per month in 2000; monthly data include estimates of about 15,500 tons of scrap per month consumed by ingot makers and several smelters that report on an annual basis.

2/ Data are rounded to no more than three significant digits; may not add to totals shown.

3/ Includes composition turnings, silicon bronze, zinc bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

4/ Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.

5/ Includes items indicated by symbol W.

TABLE 11  
COPPER STOCKS AT END OF PERIOD 1/

(Metric tons)

Period	Crude copper 2/	Refined copper						Total refined
		Refineries 3/	Wire rod mills 3/	Brass mills 3/	Other 4/	Comex 5/	LME 6/	
2001: p/								
November	88,500	24,300	30,900	24,700	4,680	215,000	601,000	900,000
December	98,000	28,600	37,600	25,500	4,680	244,000	617,000	957,000
2002:								
January	99,200	26,500	42,100	25,000	4,680	258,000	654,000	1,010,000
February	89,200	28,700	26,100	25,100	4,680	275,000	683,000	1,040,000
March	96,000	22,100	24,200	23,700	4,680	284,000	704,000	1,060,000
April	91,000	17,400	31,900	22,300	4,680	296,000	707,000	1,080,000
May	92,800	15,600	26,800	21,000	4,680	304,000	691,000	1,060,000
June	89,600	16,500	20,700	19,700	4,680	322,000	646,000	1,030,000
July	102,000	15,500	25,500	24,100	4,680	338,000	636,000	1,040,000
August	82,500	12,500	24,600	26,800	4,680	341,000	628,000	1,040,000
September	77,600	11,600	23,200	24,000	4,680	344,000	621,000	1,030,000
October	77,400	10,600	18,400	19,800	4,680	346,000	607,000	1,010,000
November	77,200	14,400	22,200	28,600	4,680	362,000	601,000	1,030,000

p/ Preliminary.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Copper content of blister and other materials in transit and in process of refining.

3/ Stocks of refined copper as reported; no estimates are made for nonrespondents.

4/ Monthly estimates based on reported and 2000 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

5/ Commodity Exchange Inc., New York.

6/ London Metal Exchange Ltd., U.S. warehouses.

TABLE 12  
AVERAGE PRICE OF COPPER IN THE UNITED STATES AND  
ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	U.S. producers delivered price cathode 1/	Comex first position 2/	LME cash price Grade A
2001:			
November	70.560	66.093	64.747
December	72.050	67.832	66.740
Year	76.854	72.567	71.574
2002:			
January	73.944	69.786	68.202
February	76.384	72.226	70.831
March	78.683	74.525	72.779
April	76.966	73.107	72.118
May	77.378	73.220	72.362
June	80.386	76.228	74.715
July	76.487	72.329	72.082
August	71.981	67.823	67.097
September	71.863	67.705	67.057
October	72.319	68.161	67.286
November	76.729	72.571	71.758
January - November	75.738	71.607	70.572

1/ Listed as "U.S. producer cathode."

2/ Listed as "Comex high grade first position."

Sources: Platts Metals Week and American Metal Market.



TABLE 13  
NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Month	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 scrap	Red brass turnings and borings
2001:				
November r/	63.40	53.69	40.19	37.10
December r/	65.87	54.47	41.47	37.00
Year r/	69.57	58.90	48.71	40.77
2002:				
January r/	67.12	55.40	41.48	37.00
February	69.45 r/	57.34 r/	43.00	37.00
March r/	72.19	59.62	43.71	37.00
April	71.82	58.80 r/	44.00	37.00 r/
May	71.98	60.39	44.00	37.00
June	74.78 r/	71.38 r/	44.00	37.00 r/
July	71.91 r/	60.59 r/	44.00	37.00 r/
August r/	66.89	55.66	42.27	37.00
September	66.80	55.68	40.80	37.00 r/
October	66.83	56.70	39.09	37.00 r/
November	71.38	60.50	41.00	37.00
January - November	70.10	59.28	42.49	37.00

r/ Revised.

Source: American Metal Market.

TABLE 14  
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	2002			2002			2002			2002		
	2001	October	January - October 2/	2001	October	January - October 2/	2001	October	January - October 2/	2001	October	January - October 2/
Brazil	--	--	--	--	--	--	--	--	--	12,000	4,030	37,400
Canada	7,210	--	8,350	43	--	75	79,700	6,110	69,700	270,000	13,400	198,000
Chile	19,600	33,000	91,100	--	--	--	87,700	2,910	29,100	174,000	24,200	212,000
Indonesia	6,010	--	2,910	--	--	--	--	--	--	--	--	--
Italy	--	--	--	--	--	--	12,200	--	--	--	--	--
Japan	--	--	--	(3/)	--	2	--	--	(3/)	8,660	855	6,870
Kazakhstan	--	--	--	--	--	--	--	--	--	82,400	--	2,060
Mexico	2,550	--	--	317	86	266	48,900	1,080	10,700	131,000	3,550	45,800
Namibia	--	--	--	--	--	--	6,840	1,700	6,340	--	--	--
Peru	11,600	2	5,960	--	--	--	22,600	--	4,730	280,000	25,700	233,000
Philippines	--	--	--	--	--	--	4,990	--	--	999	--	--
Russia	--	--	--	--	--	--	115	--	--	22,800	4,690	22,400
Spain	--	--	--	--	--	--	4,420	--	--	--	--	--
Taiwan	--	--	17	560	44	474	--	--	--	34	--	--
Turkey	--	--	2,910	--	--	--	--	--	--	--	--	--
United Kingdom	--	--	--	--	--	--	29	--	1	39	1,030	1,210
Uzbekistan	--	--	--	--	--	--	--	--	--	940	1,010	5,850
Other	--	--	2	25	--	2	3,480 r/	--	--	7,810 r/	629	7,220
Total	47,000	33,000	111,000	945	130	819	271,000	11,800	121,000	991,000	79,000	772,000

r/ Revised . -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes revisions to previous months' data.

3/ Less than 1/2 unit.

Source: U.S. Census Bureau; data adjusted by the U.S. Geological Survey.

TABLE 15  
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	2002			2002			2002			2002		
	2001	October	January - October	2001	October	January - October	2001	October	January - October	2001	October	January - October
Australia	--	--	11	12	--	5	65	19	66	17	--	1,650
Belgium	18	--	42	--	--	(2/)	1,550	--	179	30	--	--
Canada	30,300	1,550	14,900	6,860	63	2,060	13,800	1,530	15,700	6,520	220	2,770
China	2,310	139	976	3	--	63	87	5	417	8,520	1	13,800
Egypt	--	--	--	--	--	--	2	--	--	2,160	--	2,200
France	1	--	--	64	--	2	2,130	20	100	62	--	42
Germany	443	--	28	50	--	74	982	23	182	169	15	65
Hong Kong	87	6	20	2	--	160	2,470	273	2,230	2,330	--	38
India	8	4	4	261	(2/)	153	125	10	68	--	192	741
Israel	836	--	--	18	--	--	65	--	44	6	5	19
Italy	20	--	--	--	--	--	376	19	169	27	56	56
Japan	19	--	36	8	22	1,330	216	--	40	460	1	40
Korea, Republic of	699	--	197	1,090	--	35	1,320	34	504	78	23	468
Mexico	9,130	64	2,480	15,300	1,340	8,330	22	5	34	821	5	126
Netherlands	44	--	33	70	35	35	4	133	971	35	--	16
Peru	--	--	974	--	--	39	--	--	--	--	--	--
Philippines	--	--	--	--	--	3	96	5,820	5,850	--	--	3
Singapore	159	--	60	(2/)	--	(2/)	407	20	403	14	--	7
Sri Lanka (Ceylon)	--	--	--	--	--	--	--	--	80	--	75	75
Taiwan	347	15	40	50	13	97	1,130	50	922	146	2	1,610
Thailand	22	--	5	--	--	--	264	55	241	--	--	--
United Kingdom	280	--	8	49	--	65	451	40	384	457	(2/)	527
Venezuela	501	--	--	--	--	--	5	--	8	140	--	205
Other	99 r/	7	47	62 r/	25	66	479 r/	154	634	524 r/	11	171
Total	45,300	1,780	19,900	23,900	1,500	12,500	26,000	8,210	29,300	22,500	606	24,600

r/ Revised. -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 16  
U.S. COPPER SCRAP TRADE 1/

(Metric tons, gross weight)

Country or territory	Imports						Exports					
	Unalloyed			Alloyed			Unalloyed			Alloyed		
	2002			2002			2002			2002		
	2001	October	January - October	2001	October	January - October	2001	October	January - October	2001	October	January - October
Belgium	--	--	--	388	--	--	1,260	398	1,830	1,470	748	5,240
Canada	10,600	818	12,600	45,800	3,860	32,500	38,700	1,810	17,300	33,100	1,000	17,400
China	41	--	--	15	37	547	156,000	7,940	94,800	136,000	13,000	120,000
Colombia	--	--	--	899	--	565	--	--	--	18	--	2
Costa Rica	868	105	890	635	14	356	--	--	--	3	--	2
Dominican Republic	1,550	90	1,170	1,570	62	771	--	--	--	--	--	--
France	--	--	--	188	18	102	11	318	1,530	59	265	1,800
Germany	27	3	6	62	163	693	6,500	626	12,600	9,480	1,420	14,200
Guatemala	499	14	460	1,990	85	1,000	--	--	--	--	--	(2/)
Honduras	484	13	312	656	33	268	--	--	--	--	--	--
Hong Kong	--	--	3	--	--	--	4,300	16	7,090	5,440	471	5,100
India	--	--	--	--	(2/)	(2/)	2,770	248	3,480	33,400	3,880	37,000
Indonesia	--	--	--	20	--	60	66	254	742	58	133	491
Italy	309	--	116	--	--	--	117	--	30	143	230	249
Jamaica	283	--	310	470	--	221	--	--	--	--	--	--
Japan	169	9	67	--	57	128	13,800	594	9,570	13,200	608	7,150
Korea, Republic of	--	--	19	20	(2/)	40	24,400	1,220	12,200	17,800	1,160	15,300
Mexico	13,500	885	8,040	24,000	2,010	15,200	2,760	140	2,020	4,370	66	234
Nicaragua	276	11	271	54	15	131	--	--	--	--	--	--
Panama	161	--	165	804	10	671	--	--	--	--	--	79
Peru	347	--	--	112	--	--	--	--	--	--	--	--
Spain	--	--	--	47	--	(2/)	549	--	109	2,710	--	1,750
Switzerland	--	--	--	45	170	170	596	12	116	3,720	7	1,290
Taiwan	--	--	15	554	20	355	9,120	621	8,510	5,870	607	7,680
United Kingdom	64	18	118	919	190	1,550	36	--	--	570	387	1,360
Venezuela	42	--	54	874	58	1,660	--	--	--	--	--	--
Other	992	64	767	4,250 r/	239	2,250	911 r/	163	1,570	4,400 r/	395	3,110
Total	30,300	2,030	25,300	84,400	7,040	59,200	262,000	14,400	174,000	272,000	24,400	239,000

r/ Revised. -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: U.S. Census Bureau.